

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/826,792	04/09/2004	Sharperson G. Johnson	84,446	1330	
Office of Couns	7590 01/17/2007 sel Code OC4		EXAM	INER	
Naval Surface Warfare Center Indian Head Division 101 Strauss Ave., Bldg. D-31 Indian Head, MD 20640-5035			COOLEY, C	COOLEY, CHARLES E	
			. ART UNIT	PAPER NUMBER	
			1723	1723	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVER	DELIVERY MODE	
3 MOI	NTHS	01/17/2007	PAP	ER	

# Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
	10/826,792	JOHNSON, SHARPER	RSON G.			
Office Action Summary	Examiner	Art Unit				
<u> </u>	Charles E. Cooley	1723				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence addres	S			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I.  lely filed  the mailing date of this commu  O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 15 No.	<u>ovember 2006</u> .					
2a)⊠ This action is <b>FINAL</b> . 2b)□ This	action is non-final.					
3) Since this application is in condition for allowar	·		rits is			
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	33 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1,3-10,14-18,21 and 22 is/are pending	g in the application.					
4a) Of the above claim(s) is/are withdraw	vn from consideration.					
5)⊠ Claim(s) <u>15-18</u> is/are allowed.						
•						
7) Claim(s) is/are objected to.	- alagdian waquiranaant	•				
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examine						
10)⊠ The drawing(s) filed on <u>09 April 2004</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action of form PTO-1	J2.			
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a)	-(d) or (f).				
1. Certified copies of the priority documents	s have been received.					
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)	- 					
1) Notice of References Cited (PTO-892)	4) Interview Summary Paper No(s)/Mail Da					
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)     Paper No(s)/Mail Date		ratent Application (PTO-152	2)			

Art Unit: 1723

# **FINAL OFFICE ACTION**

### **Drawings**

- 1. The drawings remain objected to under 37 CFR § 1.83(a) since the drawings must show every feature of the invention specified in the claims. Therefore, the following features must be shown or the features canceled from the claims. No new matter should be entered.
  - a. the subject matter of claim 14.
  - b. the subject matter of new claim 21.
  - c. the subject matter of new claim 22.

Since the drawings lack any cross-sectional views, the subject matter relating to particular diameters and shapes cannot be ascertained from the sole Figure as filed.

### <u>INFORMATION ON HOW TO EFFECT DRAWING CHANGES</u>

### **Replacement Drawing Sheets**

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" (37 CFR 1.121(d)) and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

#### **Annotated Drawing Sheets**

**Art Unit: 1723** 

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

### **Timing of Corrections**

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

### Specification

- 2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification such as these noted below:
- 3. The disclosure is objected to because of the following informalities:
  - a. Page 6, line 15: replace "fo" with --of--.
  - b. Page 7, line 1: replace "lever" with --levels--.
  - c. Page 7, line 2: replace "lever" with --level--.
  - d. Page 8, line 18: replace "lever" with --level--.

Appropriate correction is required.

Art Unit: 1723

4. The substitute Abstract of the Disclosure is objected to because:

a. it is presented with irregular and unexplained spacing rendering it the strangest looking abstract this examiner has seen. An abstract on a separate sheet in proper paragraph format is required (37 CFR 1.121).

Correction is required. See MPEP § 608.01(b).

5. The title is acceptable.

### Claim Objections

6. Claim 15 is objected to because the "processing materials" recited in line 12 should be related back to the explosive materials recited in lines 2 and 4. Thus, in line 12, replace "processing" with --said explosive-- to clarify the claimed method of manufacturing explosive materials.

Correction is required.

### Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 8. Claims 1, 3-9, 14, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Melvin (US 846,751).

Art Unit: 1723

The patent to Melvin discloses a feed hopper (the lower section of the casing below h) with access h that receives materials from an extender A being attached at the top of the feed hopper (above h); the extender having the recited angled baffles f therein; the extender A having an access port (the top portion thereof) that is inherently capable of being closed; the feed hopper having a first interior diameter (e.g., any diameter cut in the uniformly dimensioned region between h and f<sup>2</sup>); the extender A having a second uniform interior diameter (e.g., any diameter cut in the uniformly dimensioned region between h and a) such that first interior diameter is substantially the same as the second interior diameter as seen in Figs. 1-2; wherein said at least two baffles f are arranged along separate baffle levels (at vertically disposed levels j, j, j) where each baffle f of said at least two baffles is inter-spaced at equal vertical distances (note the baffles f are attached to wall members j at equal vertical distances since the wall members i are equally vertically spaced and the baffles f are attached to respective wall members j at about the vertically center region of each member j); each baffle f extends from an inner side of said extender A and is oriented at an angle (i.e., any angle) toward a lower baffle of said at least two baffles as seen in Figs. 1-2.

9. Claims 1, 3-5, 8-10, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Benjamins (US 1,268,813).

The patent to Benjamins discloses a feed hopper 22 with an access (proximate 25) that receives materials from an extender 11, 21 being attached at the top of the feed hopper 22; the extender 11, 21 having the recited angled baffles 15-19 therein; the

Page 6

Application/Control Number: 10/826,792

Art Unit: 1723

extender 11, 21 having an access port (the top portion thereof) that is capable of being closed by cover 13; the feed hopper 22 having a first interior diameter (e.g., any diameter cut in the uniformly dimensioned region between 22a and the distal lower end of feed hopper 22); the extender 11, 21 having a second uniform interior diameter (e.g., any diameter cut in the uniformly dimensioned region 21) such that first interior diameter is substantially the same as the second interior diameter as seen in Fig. 1; wherein said at least two baffles 15-19 are arranged along separate baffle levels and where each baffle 15-19 of said at least two baffles is inter-spaced at equal vertical distances (note the baffles 15-19 each have a distal end that terminates at equally vertically disposed levels as seen in Fig. 1); each baffle 15-19 extends from an inner side of said extender 11, 21 and is oriented at an angle (i.e., any angle) toward a lower baffle of said at least two baffles as seen in Fig. 1; and an attaching mechanism 21a to attach the extender 11, 21 to the feed hopper 22 (col. 2, lines 60-61).

### Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Melvin (US 846,751) or Benjamins (US 1,268,813) in view of Hurst (US 6,267,495).

Melvin (US 846,751) or Benjamins (US 1,268,813) each disclose the recited feed hopper and extender having replicated configurations as explained above but do not disclose the recited rectangular configuration of the feed hopper and extender. The patent to Hurst discloses a feed hopper 40 that receives materials from an extender 32 being attached at the top of the feed hopper as seen in Figs. 2-3. Hurst teaches that feed hopper 40 and extender 32 may be of many different shapes, including rectangular. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have modified the shape of the feed hopper and extender in Melvin or Benjamins to be of any desired shape, including rectangular as disclosed by Hurst for the purposes of altering the flow characteristics of the materials through the feed hopper and extender or to facilitate manufacturing of the feed hopper and extender (col. 4, lines 12-23).

Furthermore, it is noted that one of ordinary skill in the art would have recognized that circular, square, and rectangular are all well known types of shapes for feeding devices/hoppers used in the materiel feeding/agitating art (as clearly evidenced by the teachings of Hurst), and that such shapes are generally alternative mechanical options used for feeding devices of the type shown in the prior art to Melvin and Benjamins and as claimed by applicant. Moreover, applicant's specification does not indicate that the type of shape employed solves any stated problem or produces any new or unexpected result (as clearly evidenced by page 6, lines 2-4). Accordingly, it can be concluded that the particular type of shape employed on feeding devices such as the claimed feed hopper and extender would have been a matter of obvious design choice to one of

ordinary skill in the art and thus does not serve to patentably distinguish the claimed invention over the prior art. *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975).

#### Allowable Subject Matter

12. Claims 15-18 are allowed (assuming the claim objection to claim 15 is overcome).

### Response to Amendment

13. Applicant's arguments filed 15 NOV 2006 have been fully considered but they are not deemed to be persuasive.

Applicant is reminded that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Turning to the rejection of the claims under 35 U.S.C. § 102(b), it is noted that the terminology in a pending application's claims is to be given its broadest reasonable interpretation (*In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989))

and limitations from a pending application's specification will not be read into the claims (Sjolund v. Musland, 847 F.2d 1573, 1581-82, 6 USPQ2d 2020, 2027 (Fed. Cir. 1988)). Anticipation under 35 U.S.C. § 102(b) is established only when a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of a claimed invention. See Constant v. Advanced Micro-Devices. Inc., 848 F.2d 1560, 1570, 7 USPQ2d 1057, 1064 (Fed. Cir.), cert. denied, 488 U.S. 892 (1988); RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). Moreover, anticipation by a prior art reference does not require either the inventive concept of the claimed subject matter or the recognition of properties that are inherently possessed by the prior art reference. Verdegaal Brothers Inc. v. Union Oil co. of California, 814 F.2d 628, 633, 2 USPQ2d 1051, 1054 (Fed. Cir. 1987), cert. denied, 484 U.S. 827 (1987). A prior art reference anticipates the subject matter of a claim when that reference discloses each and every element set forth in the claim (In re Paulsen, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994) and In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990)); however, the law of anticipation does not require that the reference teach what Applicant is claiming, but only that the claims "read on" something disclosed in the reference. Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984) (and overruled in part on another issue), SRI Intel v. Matsushita Elec. Corp. Of Am., 775 F.2d 1107, 1118, 227 USPQ 577, 583 (Fed. Cir. 1985). Also, a reference anticipates a claim if it discloses the claimed invention such that a skilled artisan could take its teachings in combination with

his own knowledge of the particular art and be in possession of the invention. See *In re Graves*, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995), cert. denied, 116 S.Ct. 1362 (1996), quoting from *In re LeGrice*, 301 F.2d 929, 936, 133 USPQ 365, 372 (CCPA 1962).

Page 10

With respect to the applied prior art under 35 U.S.C. § 102(b), the examiner has explicitly demonstrated how the reference discloses each and every element set forth in the claims and how the pending claims read on the disclosure of the reference, hence the rejection is considered proper.

It is apparent from the remarks that Applicant believes the claims to be much more limited in scope than this reexamination reveals. With regard to the Melvin patent, the rejected claims are not drafted to exclude baffles that are inclined downwardly and laterally, contrary to Applicant's assertions. All that is required by amended claim 1 is baffles arranged along separate baffle levels and inter-spaced at equal vertical distances so that each baffle extends from an inner side of said extender and is oriented at an angle toward a lower baffle of said at least two baffles. This baffle arrangement is clearly shown and disclosed by Melvin. The only mischaracterization occurring here is solely by Applicant since Applicant asserts Melvin lacks a baffle at each level where each baffle is only inclined in length. It is noted the word "inclined" in lacking from the rejected claims and the claims are not restricted to "only" one particular baffle orientation whatsoever. Although not readily supported by the instant disclosure or dearth of features shown in the sole Figure filed with the application, if the claims recited that the distal edge of each baffle is disposed a uniform distance from the interior wall of

the extender, Applicant may be correct in arguing that laterally inclined blades (like those of Melvin) are excluded by this language. Note also, with respect to claim 21, that Melvin shows a diameter of the feed hopper and a diameter of the extender being abut equal as explained above (with "a diameter" being any cross-sectional diameter cut along the regions identified in the rejection). The claims lack the extent to which the uniform diameters (or rectangular configurations) extend but merely recite some section (such as two arbitrary cross-sectional areas thereof) have the same diameter or rectangular configuration.

Applicant further argues that a width of each baffle 32 is level in relation to an inner side of the extender in order to retain material and not inclined or slanted like Melvin's invention. As alluded to above, such arguments are of no patentable consequence because it is well settled that features not claimed may not be relied upon in support of patentability. *In re Self*, 671 F.2d 1344, 213 USPQ 1 (CCPA 1982). Although a claim should be interpreted in light of the specification disclosure, it is generally considered improper to read limitations contained in the specification into the claims. See *In re Prater*, 415 F.2d 1393, 162 USPQ 541 (CCPA 1969) and *In re Winkhaus*, 527 F.2d 637, 188 USPQ 129 (CCPA 1975), which discuss the premise that one cannot rely on the specification to impart limitations to the claim that are not recited in the claim. Limitations not found in the language of a claim cannot be read into the claim. *E. I. Du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 7 USPQ2d 1129 (Fed. Cir. 1988). Limitations appearing in the patent specification cannot be read into the claims. Id. Nor is it permissible to inject into claims limitations referred

to in the prosecution history. *Intervet America, Inc. v. Kee-Vet Labs, Inc.*, 887 F.2d 1050, 1053, 12 USPQ2d 1474, (Fed. Cir. 1989).

Applicant then refers to unexpected results of the invention, yet such secondary considerations are not capable of overcoming statutory bars under 35 U.S.C 102(b).

Applicant then refers to the materials being processed and the alleged advantages of the invention in processing said materials. However, a recitation with respect to the material intended to be worked upon by a claimed apparatus (the explosive materials in this instance) does not impose any structural limitations upon the claimed apparatus, which differentiates it from a prior art apparatus satisfying the structural limitations of that claimed. See *Ex parte Masham*, 2 USPQ2d 1647, 1648 (Bd. App. 1987). Also see *In re Rishoi*, 197 F.2d 342, 344, 94 USPQ 71, 72 (CCPA 1952); and *In re Young*, 75 F.2d 996, 997, 25 USPQ 69, 70 (CCPA 1935).

With regard to the Benjamins patent, the baffles therein, by virtue of their different lengths, have terminal ends that are vertically spaced along the vertical height of the extender and thus the baffles can be construed as being at different levels along the extender, contrary to Applicant's conclusion. Again, the claims are not drafted to exclude baffles of various shapes such as the conical baffles of Benjamins. The claims merely recite baffles of no particular shape or geometry to define over the prior art.

Applicant further states that the Benjamins device could not retain a given amount of processing material at each baffle level where the weight of the processing materials remains segmented within the extender and Benjamins' structure could not likely produce the extended run times in the manufacture of explosive materials like

Applicant's inventive structure. Applicant's position on this point is considered to be speculative attorney's argument unsupported by objective technical evidence on the issue. Arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Pearson*, 494 F.2d 1399, 1405, 181 USPQ 641, 646 (CCPA 1974). The fact that one skilled in the art might realize from reading a disclosure that something is possible is not a sufficient indication to such person that the something is a part of the appellants' disclosure. See *In re Barker*, 559 F.2d 588, 591, 194 USPQ 470, 472 (CCPA 1977), cert. denied, 434 U.S. 1064 (1978).

In conclusion, the amendments made in the instant application are not deemed of a substantive nature to define over the prior art and thus the rejections are considered proper.

#### Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL
ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION.
IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE
MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT
MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED
STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL

Application/Control Number: 10/826,792

Art Unit: 1723

EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION. ANY RESPONSE FILED AFTER THE MAILING DATE OF THIS FINAL REJECTION WILL BE SUBJECT TO THE PROVISIONS OF MPEP 714.12 AND 714.13.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri. The examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/826,792

Art Unit: 1723

Page 15

Charles E. Cooley Primary Examiner Art Unit 1723

11 January 2007